Listing of the Claims:

This listing of claims is intended to replace all prior versions, and listings, of claims in the application. No claims are currently amended, added, or cancelled.

1. (previously presented) An apparatus for the production of a pocketed coil spring having a predetermined spring profile, said apparatus comprising:

a coiling section in which the coil spring is formed from wire fed to the coiling section, said coiling section comprising a wire feed by which wire is drawn through said coiling section, a first coiling element which controls a diameter of the coil spring, a second coiling element which controls a pitch of the coil spring, a first drive by which first positions or first orientations of the first coiling element can be altered, a second drive by which second positions or second orientations of the second coiling element can be altered,

an encapsulation section in which the coil spring is inserted between juxtaposed sheets of material and in which the sheets of material are joined together to form a pocket enclosing the coil spring, and

a programmable control system operably linked to said first and second drives to alter the first positions or the first orientations of said first coiling element and the second positions or the second orientations of said second coiling element relative to the wire feed, said programmable control system comprising a plurality of stored data arrays or tables, each data array or table determines a plurality of the first positions or a plurality of the first orientations of said first coiling element and a plurality of the second positions or a plurality of the second orientations of said second coiling element for a particular coil spring profile.

2. (previously presented) Apparatus as claimed in Claim 1, wherein the programmable control system comprises a programmable logic controller by which computer-numerical-control of the coiling section is achieved.

3. (previously presented) Apparatus as claimed in Claim 2, wherein the programmable logic controller is operably linked to a third drive by which the wire feed can be controlled.

4. (previously presented) Apparatus as claimed in Claim 3, wherein said first, second and third drives each comprise a servo-motor.

5. (canceled)

6. (previously presented) Apparatus as claimed in Claim 1, wherein one or more electromagnets are mounted at the exit of the coiling section, said one or more electromagnets engaging each spring as it leaves the coiling section to substantially dampen excessive oscillation in each spring, said spring being mechanically drawn away from said one or more electromagnets as said spring is conveyed to the encapsulation section.

7. (previously presented) Apparatus as claimed in Claim 1, wherein the programmable control system is also operably linked to the encapsulation section, to control movement of material through the encapsulation section.

8. (previously presented) Apparatus as claimed in Claim 7, wherein a servo motor operably linked to the programmable control system controls movement of the material through the encapsulation section, such that said material is advanced in increments corresponding to a desired pocket width.

9. (previously presented) Apparatus as claimed in Claim 1, wherein a mechanism by which the springs are transferred to the encapsulation section and inserted between the sheets of material comprises:

a rotating wheel with radially extending arms, successively formed springs being engaged by successive arms of said wheel;

a spring compression system that compresses the springs as they are conveyed to the encapsulation section on the arms of said rotating wheel; and

a reciprocating cassette into which the compressed springs are delivered by said wheel and within which the compressed springs are transported to the encapsulation section.

10. (previously presented) Apparatus as claimed in Claim 1, further comprising ultrasonic welding units by which the sheets of material are joined together to form pockets.

11. (previously presented) Apparatus as claimed in Claim 10, wherein said ultrasonic welding units comprises longitudinal welding units arranged parallel to the longitudinal axis of the sheets of material and transverse welding units arranged transverse to said axis.

12. (previously presented) Apparatus as claim in Claim 10, wherein said ultrasonic welding units comprises ultrasonic welding horns with castellated lower edges.

13. (previously presented) Apparatus as claimed in Claim 11, wherein said transverse welding units comprises a pair of welding horns arranged colinearly.

14. (previously presented) Apparatus as claimed in Claim 12, further comprising a positioning system that alters a position of the transverse welding units on said longitudinal axis of said sheets of material.

15. (previously presented) Apparatus as claimed in Claim 10, wherein the ultrasonic welding units comprise ultrasonic welding horns, at least one of which acts against a fixed anvil provided with a surface coating which acts as a cushion for said welding horn.

16. (original) Apparatus as claimed in Claim 15, wherein said surface coating comprises a tape applied to the surface of the anvil.

17. (original) Apparatus as claimed in Claim 16, wherein said tape is a polytetrafluoroethylene tape.

18. (previously presented) Apparatus as claimed in Claim 1, wherein said sheets of material are drawn through the encapsulation section by a pair of horizontally disposed rollers, at least one of which is driven by a servo motor controlled by the programmable control system.

19. (original) Apparatus as claimed in Claim 18, wherein said rollers have rubberised surfaces.

20. (previously presented) Apparatus as claimed in Claim 1, wherein said encapsulation section further comprises a transport system for drawing said sheets of material incrementally through the encapsulation section and a welding system that welds the sheets of material together,

wherein the transport system and the welding system are controlled by the programmable control system.

21. (previously presented) A method of producing a pocketed coil spring, the method comprising:

providing a programmable control system storing a plurality of data arrays or tables, wherein each of the data arrays or tables determine a plurality of positions or orientations of coiling elements for forming a particular spring profile,

selecting a data array or table according to a desired spring profile,

feeding wire through a coiling section so as to form a coil, wherein the programmable control system alters the positions or orientations of the coiling elements to control a diameter and a pitch of the coil according to the selected data array or table,

separating said coil from said wire,

compressing said coil,

inserting said coil between juxtaposed sheets of material, and

joining said sheets of material together so as to encapsulate said coil.

22. (canceled)

23. (previously presented) A method as claimed in Claim 21, wherein the positions or orientations of each of the coiling elements are set by a server motor operating under control of the programmable control system.

Claims 24-40 (canceled)

Amendments to the Drawings

A replacement sheet "3/4" is provided herewith. Figure 4 has been amended to show reference numeral "40" and to show springs "20" at the different stations.